

U.S. Appln. No. 10/004,980
Page 2

Amendments to the Claims:

Claim 15 (canceled):

Claim 16 (currently amended): A fuel cell system comprising:

a an organic cooling fluid,

a pump for pumping the cooling fluid in a liquid state to an elevated pressure
to provide a high-pressure cooling fluid liquid,

the pump being connected to a heat generating fuel cell system component to
deliver the high-pressure cooling fluid liquid thereto,

the heat generating component being constructed to transfer heat to the cooling
fluid and change the fluid to a gas to provide a heated high-pressure cooling fluid gas,

the fuel-cell heat generating component being connected to an expander to
deliver the heated high-pressure cooling fluid gas to the expander,

the expander being constructed to produce shaft work from the fluid flowing
therethrough,

the expander being operatively connected to a second fuel cell system
component to use the shaft work generated by the expander,

the expander being connected to a condenser to deliver the fluid to a
condenser,

the condenser being constructed to remove heat from the fluid and to change
the fluid to a the organic cooling fluid in the liquid state,

the condenser being connected to the pump to deliver the liquid fluid to the
pump.

Claim 17 (currently amended): A system as set forth in claim of 16 wherein
the heat generating component comprises a fuel cell stack.

U.S. Appln. No. 10/004,980

Page 3

Claim 18 (currently amended): A system as set forth in claim 17 wherein the heat generating component comprises a catalytic combustor.

Claim 19 (original): A system as set forth in claim 16 wherein the cooling fluid comprises an organic fluid.

Claim 20 (currently amended): A fuel cell system comprising:

a an organic cooling fluid,

a pump for pumping the cooling fluid in a liquid state to an elevated pressure, the pump being connected to deliver the fluid to a heat exchanger in a fuel cell,

the fuel cell being connected to an expander to deliver the fluid to the expander,

the expander being constructed to generate shaft work from the fluid flowing therethrough, and the expander being operatively connected to an air compressor to drive the air compressor and produce compressed air,

the air compressor being connected to the fuel cell to deliver compressed air to the fuel cell,

the expander being connected to a condenser to deliver the fluid to the condenser,

the condenser being constructed to remove heat from the fluid and to change the fluid to a the organic cooling fluid in the liquid state,

the condenser being connected to the pump to deliver the liquid cooling fluid to the pump.